

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
The Proposed Extension of Part 4 of the)
Commission's Rules Regarding Outage Reporting to) PS Docket No. 11-82
Interconnected Voice Over Internet Protocol Service)
Providers and Broadband Internet Service Providers)

To: The Commission

REPLY COMMENTS

T-Mobile USA, Inc. ("T-Mobile") hereby responds to comments submitted in response to the Commission's *Notice of Proposed Rulemaking* in the above-referenced proceeding.¹ As discussed below, the record demonstrates that extension of the Part 4 mandatory outage reporting requirements to interconnected Broadband Internet Access Service Providers, Broadband Internet Service Providers (collectively "Broadband Providers") and interconnected Voice over Internet Protocol ("VoIP") Providers is not warranted at this time. Such action would impose significant burdens on the industry with little or no corresponding benefit.

If the Commission nevertheless moves forward,² the proposed thresholds for triggering an outage report should not be adopted. Outage reports should be triggered by actual outages,

¹ *The Proposed Extension of Part 4 of the Commission's Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers*, Notice of Proposed Rulemaking, 26 FCC Rcd 7166 (2011) ("NPRM").

² Numerous parties questioned the Commission's authority to adopt such regulations. See Alliance for Telecommunications Industry Solutions ("ATIS") Comments, PS Docket No. 11-82 at 9 (filed Aug. 8, 2011) (ATIS submitted its comments on behalf of the its Network Reliability Steering Committee ("NRSC")); American Cable Association ("ACA") Comments, PS Docket No. 11-82 at 2-5 (filed Aug. 8, 2011); AT&T Inc. Comments, PS Docket No. 11-82 at 1-9 (filed Aug. 8, 2011); CenturyLink Comments, PS Docket No. 11-82 at 24-28 (filed Aug. 8, 2011); Comcast Corporation Comments, PS Docket No. 11-82 at 7-8 (filed Aug. 8, 2011); CTIA – The

not performance degradations as proposed in the *NPRM*. The Commission thus should abandon any performance-based metrics for outage reporting.

Finally, although T-Mobile believes that mandatory outage reporting is unnecessary, if the Commission nevertheless moves forward with such reporting, wireless broadband outages should be measured at the Serving GPRS Support Node (“SGSN”) level.

DISCUSSION

I. THE RECORD DEMONSTRATES THAT ADDITIONAL, MANDATORY OUTAGE REPORTING REQUIREMENTS SHOULD NOT BE ADOPTED

The record overwhelmingly demonstrates that mandatory outage reporting requirements for Broadband Providers and VoIP Providers are not necessary at this time. Commenters generally demonstrated that the proposed expansion of the outage reporting requirements is not necessary because (i) market forces are sufficient to ensure that Broadband and VoIP networks are resilient, secure, and reliable,³ (ii) it would be premature to adopt any outage regulations before standards groups and the NRSC have been able to fully study the issue and make

Wireless Association[®] (“CTIA”) Comments, PS Docket No. 11-82 at 12-16 (filed Aug. 8, 2011); Fixed Wireless Internet Service Providers (“Fixed Wireless”) Comments, PS Docket No. 11-82 at 4 (filed Aug. 8, 2011); MetroPCS Communications, Inc. (“MetroPCS”) Comments, PS Docket No. 11-82 at 13-20 (filed Aug. 8, 2011); Telecommunications Industry Association (“TIA”) Comments, PS Docket No. 11-82 at 2-4 (filed Aug. 8, 2011); Verizon and Verizon Wireless (collectively “Verizon”) Joint Comments, PS Docket No. 11-82 at 24-36 (filed Aug. 8, 2011); XO Communications, LLC (“XO”) Comments, PS Docket No. 11-82 at 7-10 (filed Aug. 8, 2011).

³ See T-Mobile Comments, PS Docket No. 11-82 at 3-4 (filed Aug. 8, 2011); ATIS Comments at 4-5; AT&T Comments at 11-14; CenturyLink Comments at 2-3; CTIA Comments at 2, 6; MegaPath Inc. and Covad Communications Company (“MegaPath”) Comments, PS Docket No. 11-82 at 3-4 (filed Aug. 8, 2011); Sprint Nextel Corporation Comments, PS Docket No. 11-82 at 2, 5 (filed Aug. 8, 2011); United States Telecom Association (“USTelecom”) Comments, PS Docket No. 11-82 at 2-3 (filed Aug. 8, 2011); Verizon Comments at 3-6; Voice on the Net Coalition (“VON Coalition”) Comments, PS Docket No. 11-82 at 5-7 (filed Aug. 8, 2011); Vonage Holdings Corp. (“Vonage”) Comments, PS Docket No. 11-82 at 5-6 (filed Aug. 8, 2011); XO Comments at 4-5.

recommendations,⁴ and (iii) the proposed regulations would violate the recent Executive Order which directs Independent Agencies to refrain from adopting rules that would provide little benefit when compared to the corresponding costs.⁵

A. Competitive Forces are Sufficient to Ensure that Networks are Resilient, Secure, and Reliable

The President's National Security Telecommunications Advisory Committee ("NSTAC") has concluded that "market incentives will remain the fundamental driver of industry practices and standards [and] companies will continue to offer services that are as resilient and secure as customers' preferences dictate."⁶ The record in this proceeding demonstrates that VoIP and Broadband Providers are subject to competitive forces which obviate the need to extend the Part 4 outage reporting regime to these providers.⁷ As ATIS noted:

[T]he industry is already highly incited to provide reliable service to its customers. . . . The industry has not and does not wait for the Commission to raise concerns or ask questions. In fact, virtually all [network reliability] issues are resolved without Commission intervention or use of Commission mandated outage reporting data. The industry has well-established mechanisms to monitor, analyze and mitigate issues, and significant resources are expended in development and implementing mechanisms that meet the specific and unique business needs of individual service providers.⁸

⁴ See T-Mobile Comments at 4-6; CTIA Comments at 7; the National Cable & Telecommunications Association ("NCTA") Comments, PS Docket No. 11-82 at 12-18 (filed Aug. 8, 2011).

⁵ Exec. Order No. 13579, § 1(a) (July 11, 2011) ("July 2011 Executive Order"). See T-Mobile Comments at 6-10; ATIS Comments at 6-9; CTIA Comments at 5-6; Verizon Comments at 9; VON Coalition Comments at 7.

⁶ NSTAC, NSTAC REPORT TO THE PRESIDENT ON COMMUNICATIONS RESILIENCY 14 (2011) ("NSTAC Report") available at [http://www.ncs.gov/nstac/reports/NSTAC Report to the President on Communications Resiliency \(2011-04-19\)\(Final\)\(pdf\).pdf](http://www.ncs.gov/nstac/reports/NSTAC%20Report%20to%20the%20President%20on%20Communications%20Resiliency%20(2011-04-19)(Final)(pdf).pdf).

⁷ See note 3 *supra*.

⁸ ATIS Comments at 4.

B. The Proposed Mandatory Outage Reporting Requirements are Premature

The Commission's proposal to extend the Part 4 outage reporting requirements is premised on the belief that such action will improve network resiliency and reliability.⁹ However, it is unclear whether there is a direct correlation between mandatory outage reporting and improvements in network reliability and resiliency.¹⁰

Moreover, the imposition of mandatory outage reporting requirements on VoIP and Broadband Providers would be premature and the better approach is to rely on voluntary, collaborative efforts.¹¹ Voluntary best practices have been developed to improve network reliability and prevent network outages, and these practices continue to evolve. T-Mobile agrees with ATIS that:

[V]oluntary, collaborative efforts are more effective than regulatory mandates in fostering cooperation, promoting innovation and accommodating the flexibility required to meet new and evolving challenges. Regulatory mandates, on the other hand, can stifle cooperation by creating an environment in which industry participants must focus limited resources inwardly toward compliance with reporting requirements, rather than on the proactive development of Best Practices, standards and guidelines. . . . [R]eporting mandates create rigid and stagnant frameworks that are ill-suited to the dynamic nature of today's communications systems. Any reporting mandates can quickly become obsolete as new technologies are developed and implemented. . . .¹²

⁹ *NPRM* at ¶¶ 1, 13, 15-16.

¹⁰ *See, e.g.*, ATIS Comments at 3-4, 6-7 (disputing notion that outage reporting results in tangible public benefits).

¹¹ *See* note 4 *supra*.

¹² ATIS Comments at 3.

There is no evidence that the voluntary efforts to date have been insufficient to ensure network reliability and that mandatory outage reporting will improve network resiliency and reliability to a higher level than through voluntary efforts.

Moreover, the NRSC is actively evaluating outage reporting issues as they relate to VoIP and Broadband Providers. As CTIA noted:

The NRSC has been closely involved in communications disruption reporting issues for years. As such, it is the logical first step for determining the feasibility and effectiveness of outage reporting requirements for new, IP-based wireless technologies. The NRSC's consensus-based and open processes make it an ideal forum to develop and update voluntary standards and best practices that represent the best thinking of both the industry and regulators.¹³

Absent concrete evidence that voluntary reporting and best practices are insufficient, the Commission should not extend its Part 4 outage reporting regime as proposed.

C. Extension of the Part 4 Outage Reporting Requirements as Proposed Would Undermine the July 11, 2011 Executive Order

President Obama recently issued an Executive Order instructing Independent Agencies to adopt new rules “only after consideration of their costs and benefits.”¹⁴ This Executive Order extended the applicability of Executive Order 13563 – which required agencies to propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs – to Independent Agencies.¹⁵

¹³ CTIA Comments at 7.

¹⁴ July 2011 Executive Order, § 1(a). The July 2011 Executive Order also requires the FCC to consider how “to modify, streamline, expand, or repeal” existing regulations, such as the current outage reporting requirements, that may be excessively burdensome. *Id.* at §2(a).

¹⁵ *See id.*, § 1; Exec. Order No. 13563, § 1(b) (Jan. 18, 2011).

The record demonstrates that outage reporting is a significant burden for covered providers, with little tangible public benefit.¹⁶ Moreover, based on the existing record, “the Commission does not have the facts necessary to make appropriate determinations regarding broadband wireless outage reporting.”¹⁷ Accordingly, the extension of Part 4 as proposed would undermine the Executive Order.

II. ANY NEW OUTAGE REPORTING SHOULD BE TRIGGERED BY ACTUAL OUTAGES, NOT PERFORMANCE DEGRADATIONS

The record compiled in this proceeding, as well as the discussion during the Commission’s recent Network Outage Workshop, demonstrates that if mandatory outage reporting is extended to VoIP and Broadband Providers, the reports should be required only for actual outages.¹⁸ If, despite the record evidence in opposition to the proposal, mandatory outage reporting is extended to VoIP providers, T-Mobile believes that it would be acceptable to require such providers to file reports for voice outages of 30 minutes or more potentially affecting generally useful availability and connectivity of at least 900,000 user minutes.¹⁹ This standard mirrors the existing Part 4 rules applicable to traditional wireline and wireless providers of voice

¹⁶ See ATIS Comments at 3-4, 6-7; AT&T Comments at 9-17; Comcast Comments at 5-7; MegaPath Comments at 7; NCTA Comments at 3-9; Sprint Nextel Comments at 3-4, 7-9; Time Warner Cable, Inc. (“TWC”) Comments, PS Docket No. 11-82 at 5, 7-8 (filed Aug. 8, 2011); USTelecom Comments at 13-14; XO Comments at 1-2, 4. See also AT&T, Inc. Comments, ET Docket No. 04-35 at 4 (filed Aug. 2, 2010); ATIS Comments, ET Docket No. 04-35 at 1-5, n.5 (filed Aug. 2, 2010); ATIS Comments, PS Docket No. 10-270 at 5-6 (filed Jan. 31, 2011).

¹⁷ CTIA Comments at 7.

¹⁸ See T-Mobile Comments at 10-12; ACA Comments at 1, 7-10; ATIS Comments at 11-12; AT&T Comments at 23-24; CenturyLink Comments at 6-7, 11-14; CTIA Comments at 8-9; MegaPath Comments at 8; Sprint Nextel Comments at 6-8; TWC Comments at 2, 4-6; Verizon Comments at 17-23; Vonage Comments at 3-4, 7-11; VON Coalition Comments at 9; XO Comments at 10-11.

¹⁹ NPRM at ¶ 29.

service. As ATIS noted, “there are significant similarities between interconnected VoIP and other providers of voice services currently subject to the outage reporting rules such that the same basic criteria should apply to both.”²⁰

With regard to wireless broadband outages, T-Mobile reiterates that mandatory reporting is not necessary. Nevertheless, if the Commission does impose such a requirement, wireless broadband outages should be measured at the SGSN level.²¹ The SGSN is the appropriate point for measuring broadband outages because it is the smallest part of the data network into which T-Mobile has good visibility at the metro level. Consistent with ATIS’s position, an outage report should be triggered only for outages that exceed 120 minutes. Thus, under T-Mobile’s proposal, a notification would be required when an SGSN is out of service for at least 2 hours. T-Mobile also agrees with ATIS that the time for filing the outage Notification should be extended from 2 hours to 4 hours.²² An extension of the deadline for a Notification to 4 hours from discovery is appropriate given the complexity of broadband networks which increases the time necessary to verify an outage through diagnostics and various tools at a provider’s disposal.²³

The Commission should not require outage reports from Broadband or VoIP providers, however, for service degradations, as proposed.²⁴ Based on the Commission’s Network Outage Workshop, it appears that the service degradation standards proposed in the *NPRM* were

²⁰ See ATIS Comments at 12.

²¹ Each SGSN serves approximately 250-300,000 customers and is comparable to the Media Gateway for voice calls. The Commission would maintain visibility into outages that affect fewer customers, however, because Radio Access Network (“RAN”) outages will continue to be captured by the current Part 4 Network Outage Reporting System process.

²² See ATIS Comments at 13, 15.

²³ See *id.*

²⁴ See *NPRM* at ¶ 27.

designed to require outage reports when the quality of VoIP or Broadband service was so poor as to render the service unusable. The record demonstrates, however, that it would be virtually impossible to adopt such standards.²⁵ Acceptable service degradations vary based on the service provider, type of service, technology used, and application at issue.

Further, T-Mobile and other wireless carriers do not have complete visibility for a wireless broadband data session and, therefore, performance metrics will not necessarily provide a complete picture of the customer experience. In general, wireless carriers can monitor certain performance metrics between the RF environment and the final router that the broadband session crosses before being handed off into the Internet.²⁶ Even where performance monitoring is possible, the performance metrics used by T-Mobile vary significantly from those proposed in the *NPRM*. As noted in its recent *ex parte*, T-Mobile would view the following as indicative as a potential, serious degradation of service: 300 milliseconds latency and 1 percent packet loss.²⁷ Other carriers may use different performance metrics which demonstrates the complexity of adopting such metrics as a trigger for outage reporting.

For the foregoing reasons, if the Part 4 outage reporting requirements are extended, reporting should be limited to situations where there has been a complete loss of connectivity as defined by T-Mobile's proposed thresholds.

²⁵ See TWC Comments at 7-8 (noting that quality of service metrics will vary based on the service and how various factors interact); USTelecom Comments at 6-7.

²⁶ T-Mobile voice calls generally are not handed off and carried over the Internet. 4G wireless voice calls are converted to Internet Protocol and transported over Ethernet networks by access carriers. 4G wireless data sessions are transported over the Internet after they leave the T-Mobile network.

²⁷ See T-Mobile Ex Parte Presentation, PS Docket No. No. 11-82 at 8 (filed Sept. 23, 2011).

CONCLUSION

Network reliability, resiliency, and continuity are important issues for Broadband and VoIP providers. The record demonstrates, however, that mandatory outage reporting is unnecessary and inconsistent with the July 2011 Executive Order. If the Commission nevertheless imposes mandatory outage reporting on Broadband and VoIP providers, service degradations should not trigger an outage reporting obligations. Outage reports should only be required for actual outages.

Respectfully submitted,

T-MOBILE USA, INC.

By: /s/ Luisa Lancetti
Luisa Lancetti
Steve Sharkey
Harold Salters

601 Pennsylvania Avenue, NW
North Building - Suite 800
Washington, DC 20004
(202) 654-5900

October 7, 2011